

What is claimed is

1. A molding for illuminated advertising encompassing  
a poly(meth)acrylate matrix, plastic-containing  
5 scattering particles and inorganic scattering  
particles, characterized in that the molding  
encompasses from 0.05 to 0.5% by weight of  
plastic-containing scattering particles whose size  
is in the range from 5 to 15  $\mu\text{m}$  and from 0.1 to 3%  
10 by weight of inorganic scattering particles whose  
size is in the range from 1 to 7.5  $\mu\text{m}$ .
2. The molding as claimed in claim 1, characterized  
in that at least a portion of its surface has a  
15 gloss  $R_{85^\circ}$  greater than or equal to 50.
3. The molding as claimed in claim 2, characterized  
in that at least 40% of its surface has a gloss  
 $R_{85^\circ}$  greater than or equal to 50.  
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4. The molding as claimed in any of the preceding  
claims, characterized in that at least a portion  
of its surface has an average surface roughness  $R_a$   
of at most 0.3  $\mu\text{m}$ .  
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5. The molding as claimed in claim 2, characterized  
in that at least 40% of its surface has an average  
surface roughness  $R_a$  of at most 0.3  $\mu\text{m}$ .
- 30 6. The molding as claimed in any of the preceding  
claims, characterized in that the size of the  
inorganic scattering particles is in the range  
from 2 to 5  $\mu\text{m}$ .
- 35 7. The molding as claimed in any of the preceding  
claims, characterized in that the inorganic  
scattering particles encompass  $\text{BaSO}_4$ .

8. The molding as claimed in any of the preceding claims, characterized in that the size of the plastic-containing scattering particles is in the range from 6 to 12  $\mu\text{m}$ .
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9. The molding as claimed in any of the preceding claims, characterized in that it has from 0.05 to 0.3% by weight of plastic-containing scattering particles.
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10. The molding as claimed in any of the preceding claims, characterized in that the plastic-containing scattering particles encompass crosslinked polystyrene.
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11. The molding as claimed in any of the preceding claims, characterized in that the proportion of inorganic scattering particles in the molding is greater than or equal to the proportion of plastic-containing scattering particles.
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12. The molding as claimed in any of the preceding claims, characterized in that it has been colored.
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13. The molding as claimed in any of the preceding claims, characterized in that its transmittance  $\tau_{\text{D65/10}^\circ}$  to DIN 5036 is at least 30%.
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14. The molding as claimed in any of the preceding claims, characterized in that its yellowness index  $\text{D65/10}^\circ$  to DIN 6167 is smaller than or equal to 10.
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15. The molding as claimed in any of the preceding claims, characterized in that its halved-intensity angle is greater than or equal to  $15^\circ$ .
16. The molding as claimed in any of the preceding

claims, characterized in that its haze to DIN 5036 is greater than or equal to 0.15.

- 5 17. The molding as claimed in any of the preceding claims, characterized in that its impact resistance to ISO 179/1 is at least 10 kJ/m<sup>2</sup>.
- 10 18. The molding as claimed in any of the preceding claims, characterized in that its modulus of elasticity to ISO 527-2 is at least 1500 MPa.
- 15 19. The molding as claimed in any of the preceding claims, characterized in that its weathering resistance to DIN 53 387 is at least 5000 hours.
- 20 20. A process for production of moldings as claimed in any of the preceding claims, characterized in that an acrylic resin encompassing methyl methacrylate, inorganic scattering particles, and plastic-containing scattering particles is polymerized in a casting mold.
- 25 21. A process for production of moldings as claimed in any of the preceding claims, characterized in that the viscosity of the acrylic resin is in the range from 200 to 20 000 mPa\*s.